

September 24, 2003

To: Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/613,597 07/03/03

Beng Huat Chua

DIGITAL SWITCHING WIRELESS RECEIVER  
DIVERSITY AND BUFFER DIVERSITY FOR  
ENHANCED RECEPTION IN A WIRELESS  
DIGITAL AUDIO COMMUNICATION SYSTEM

Grp. Art Unit: \_\_\_\_\_

#### INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

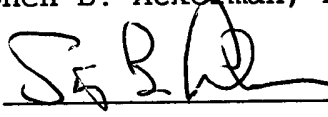
The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56. Copies of each document is included herewith.

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on September 26, 2003.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

 9/26/03

U.S. Patent 6,351,630 to Wood, Jr., "Wireless Communication System, Radio Frequency Communications System, Wireless Communications Method, Radio Frequency Communications Method, and Backscatter Radio Frequency Communications System," describes a wireless communications system having transponder coupled to one of multiple selectable antennas.

U.S. Patent 6,272,190 to Campana, Jr., "System for Wireless Transmission and Receiving of Information and Method of Operation Thereof," provides a system and method for wireless transmission and receiving of information.

U.S. Patent 6,185,258 to Alamouti et al., "Transmitter Diversity Technique for Wireless Communications," teaches a transmitter diversity technique for wireless communications.

U.S. Patent 6,181,749 to Urabe et al., "Diversity Reception Apparatus," details a diversity receiver.

U.S. Patent 6,088,407 to Buternowsky et al., "Digital Diversity Receiver System," describes a digital diversity receiver system employing one or more transmitters, a plurality of receivers, and at least one two-way personal paging unit or pager.

U.S. Patent 5,799,042 to Xiao, "Wireless Digital Communication System, a Radio Apparatus, A Digital Speaker, and a Digital Speaker Controlling Apparatus," describes wireless digital communication systems that apply an antenna diversity scheme to combat fading in a received radio system having a single receiver front-end.

U.S. Patent 5,073,900 to Mallinckrodt, "Integrated Cellular Communications System," provides a cellular communications system using spread spectrum system with code division multiple access (CDMA), and employing forward error correction coding (FECC) to enhance the effective gain and selectivity of the system.

U.S. Patent 4,517,669 to Freeburg et al., "Method and Apparatus for Coding Messages Communicated Between a Primary Station and Remote Stations of a Data Communications System," describes a method and apparatus for coding messages communicated between a primary station and remote stations of a data communications system.

"Interference Cancellation using Antenna Diversity for EDGE - Enhanced Data Rates in GMS and TDMA/136," Bladsjo et al., Proceeding Vehicular Technology Conf., 1999, pp. 1956-1960, vol. 4, discusses the evaluation of EDGE (enhanced data rates for global evolution).

FS-01-003

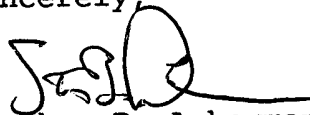
An English translation of the Abstracts of the following two Foreign Patents is enclosed:

Japanese Patent Laid-Open No. 4-8031 JP4008031 (Hiroyuki), describes a reception diversity system, which generates an error correcting signal indicating the correction every time received data is corrected.

Japanese Patent Laid-Open No. 1-265739 JP1265739, (Kiyoyuki, et al.), provides a system for minimizing the effect of reception level fluctuation and phase fluctuation due to fading.

"Cochannel Interference Suppression Through Time/Space Diversity," Calderbank, et al., IEEE Transactions on Information Theory, May 2000, Vol: 46, Issue: 3, pp. 922-932, discusses wireless systems that are subject to a time-varying and unknown a priori combination of cochannel interference, fading, and Gaussian noise.

Sincerely,

A handwritten signature in black ink, appearing to read 'SBA', with a long horizontal stroke extending to the right.

Stephen B. Ackerman,  
Reg. No. 37761

FS-01-003

10/613,597

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

SEP 29 2003

(Usual verbal shouts if necessary)

Applicant

Beng Huat Chua

Filing Date

07/03/03

Group Art Unit

## U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6351630	2/26/02	Wood, Jr.	455	101	4/24/01
	6272190	8/7/01	Campagna, Jr.	375	347	2/10/98
	6185258	2/6/01	Alamouti et al.	375	260	5/7/98
	6181749	1/30/01	Urabe et al.	375	267	10/29/98
	6088407	7/11/00	Buternowsky et al.	375	347	9/11/98
	5799042	8/25/98	Xiao	375	285	10/16/95
	5073900	12/17/91	Mallinckrodt	375	1	3/19/90
	4517669	5/14/85	Freeburg et al.	370	82	7/11/83

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	JP 4008031	1/13/92	Japan	H04L1	/06		
	JP 1265739	10/23/89	Japan	H04L1	/02		

## OTHER DOCUMENTS (Including Author, Title, Date, Portmanteau Pages, Etc.)

-	"Cochannel Interference Suppression Through Time/Space Diversity", A.R. Calderbank et al., IEEE Trans. on Info. Theory, Vol. 46, No. 3, May 2000, pp. 922-932.
-	"Interference Cancellation using Antenna Diversity for EDGE - Enhanced Data Rates in GSM and TDMA/136, Bladsjo et al., Proc. Vehicular Tech. Conf., 1999, Vol. 4, pp. 1956-1960.
EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.